

FIG.9 (RAMAN **AMPLIFICATION** MEDIUM) i 15 20 63 WDM LIGHT **EDFA** RAMAN EXCITATION 33 LIGHT 10 **EDFA** CONTROL **EXCITATION** LIGHT SECTION **SOURCE** 14 64 RAMAN SUPERVISORY CONTROL CONTROL SIGNAL INTERRUPTION INTERRUPTION SECTION MONITOR SECTION DETECTION DETECTION

FIG.10

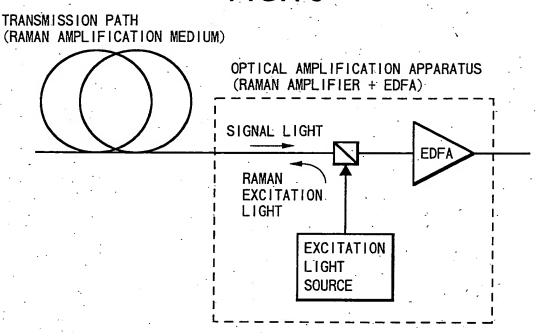
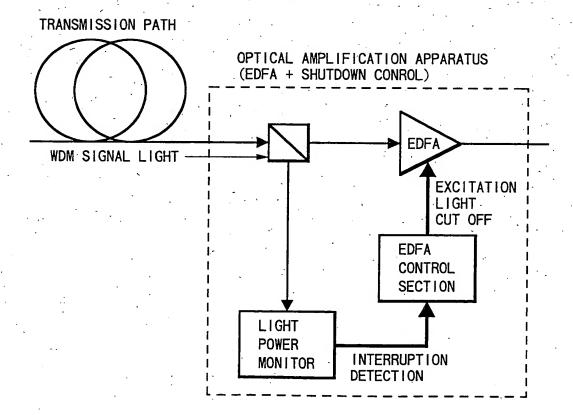


FIG.11



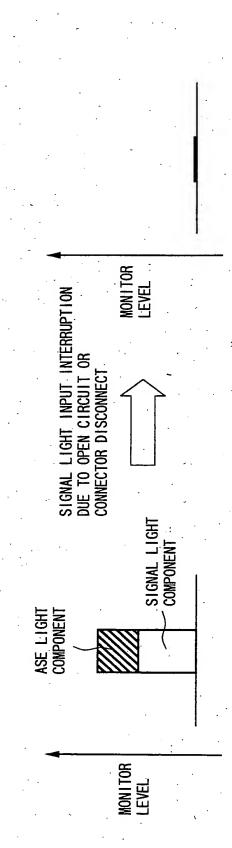


FIG.12A

FIG.12B

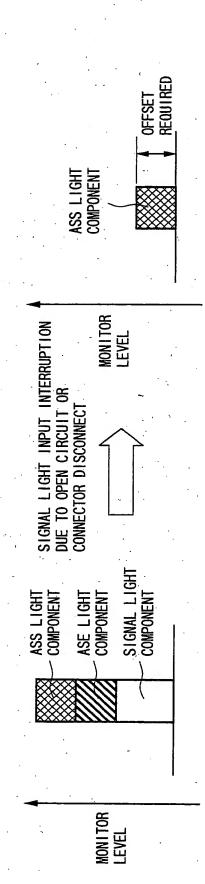


FIG.13A

FIG.13B